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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,820	07/10/2001	Chris Del Sordo	GIC-639	7855
20028	7590	06/30/2005	EXAMINER	
Lipsitz & McAllister, LLC 755 MAIN STREET MONROE, CT 06468			CHANG, SHIRLEY	
			ART UNIT	PAPER NUMBER
			2614	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/901,820

Applicant(s)

DEL SORDO ET AL.

Examiner

Shirley Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**Claim Rejections - 35 U.S.C. § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**1. Claims 1-22 rejected under 35 U.S.C. 102(b) as being anticipated by MacInnis (US 6,487,723).**

As to claim1:

- The claimed "transmitting a software image that includes a code section lookup table" is met by "FIG. 3 shows in more detail how information regarding different module versions may be maintained in a table T and transmitted to a plurality of terminals, each of which maintains an internal table describing its compatibility requirements" (column 4, lines 63-67). Furthermore, "suppose that module 202a is a video game which requires 500 kilobytes of memory in an HCT, while module 202b is another version of the same video game which requires 1 megabyte of memory to operate. Thus, module 202a may have a module identifier such as "Video Game X" (represented by A in table T) while module 202b may have the same or a similar module identifier such as "Video Game X" (represented by B in table T)" (column 4, lines 1-14).

- The claimed “a common code section for all terminals in the network” is met by ‘versions which can operate across different terminal hardware manufactures, operating system manufactures, and audio cards. The final entry depicts a data table which can be downloaded by any terminal which includes an operating system manufactured by X; no other capabilities or interfaces are required’ (column 5, lines 43-57).
- The claimed “and specific code sections for different terminals in the network” is met by “transmitting source 202 continuously broadcasts all versions of all the modules in a loop. Each terminal may download the correct version of software and/or data from transmitting source 202” (column 4, lines 22-44).

The claimed “said specific code sections being provided for at least one of:

- The claimed “(i) different terminal hardware configurations” are met by “table 203 may identify the amount of memory currently installed” (column 4, lines 45-59).
- The claimed “(ii) different terminal device driver code” is met by “table 203 may identify the version number of the currently executing operating system” (column 4, lines 45-59).
- The claimed “(iii) different terminal models” is met by “table 203 may identify the manufacturer’s model number of the terminal” (column 4, lines 45-59).

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- The claimed “(iv) different terminal software features” is met by “table 203 may identify the version number of the currently executing operating system” (column 4, lines 45-59).
- The claimed “(v) different system protocols” is met by ‘an entry for module A that includes a field indicating memory required to execute,’ “version number of the currently executing operating system,” “current hardware configuration,” and “the amount of available CPU memory installed, or largest loadable block” (column 4, lines 45-59).

As to claim 2:

- The claimed “wherein said common and specific code sections together include all of the executable code necessary to enable a plurality of different end user terminals coupled to said network, to provide services to respective end users” is met by ‘Four terminals 313 through 316 are illustrated in FIG. 3 as being coupled to network N. In accordance with various aspects of the invention, table T may be transmitted continuously over network N to all terminals, which receive the table and extract information therefrom to determine which modules are compatible with the terminal. A computer program selects a compatible software module to be downloaded’ (column 6, lines 17-29).

As to claim 3:

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- The claimed “said software image is processed by said end user terminals to locate and extract common and specific code sections intended for the particular terminal” is met as discussed in claim 2.

As to claim 4:

- The claimed “extracted common and specific code sections are stored in the terminal” is met by the “downloadable modules” (column 6, lines 8-16) and extraction as discussed in claim 2.

As to claim 5:

- The claimed “first section containing information required to enable end user terminals to identify the specific code sections for the terminal and a second section for enabling the end user terminals to locate the common and specific code sections within said software image for extraction and storage” is met by claims 1-4.

As to claim 6:

- The claimed “user terminals: locate and extract the common code sections using the second section of said code section lookup table; and subsequently locate and extract the specific code sections using the first and second sections of the code section lookup table” is met by as discussed in claims 1-4.

As to claim 7:

- The claimed "said code section lookup table includes Board ID descriptions for identifying specific code sections based on different terminal hardware configurations" is met as discussed in claim 1.

As to claim 8:

- The claimed "said code section lookup table includes Family ID descriptions for identifying specific code sections based on different terminal manufacturers" is met as discussed in claim 1 and also "As shown in FIG. 2, each terminal may include an internal table such as table 203a in terminal 203. Table 203 may identify the manufacturer's model number of the terminal, the version number of the currently executing operating system, the amount of memory currently installed, and the current hardware configuration (for example, interface type such as Ethernet, etc.) (Column 4, lines 45-51).

As to claim 9:

- The claimed "method in accordance with claim 1, wherein said code section lookup table includes Model ID descriptions for identifying specific code sections based on different terminal models" is met as discussed in claim 1.

As to claim 10:

- The claimed "The claimed "said code section lookup table includes Software ID descriptions for identifying specific code sections based on different terminal software features" is met as discussed in claim 1.

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As to claim 11:

- The claimed "Software IDs are provided to said terminals via at least one of (i) end user input and (ii) a system message" is met as discussed in claim 1 and "FIG. 5 shows how a terminal may download an application module or data module in response to selecting an application, whether by user input or other means (e.g., the operating system may select a program or data table for a purpose)" (column 8, lines 1-16) Software IDs are provided with the compatibility table when a module request is made as discussed in claim 1.

As to claim 12:

- The claimed "code section lookup table includes Protocol ID descriptions for identifying specific code sections based on different system protocols" is met as discussed in claim 1.

As to claim 13:

- The claimed "method in accordance with claim 12 wherein Protocol IDs are provided to said terminals from a headend" is met by 'FIG. 2 shows a system for downloading different module versions to diverse HCTs in accordance with various aspects of the invention. In FIG. 2, the system 200 includes an authoring source 201, a transmitting source 202 such as a headend, a network N such as a cable television network, and a plurality of terminals 203 and 204 such as HCTs which are coupled to the network. A plurality of modules indicated generally by 201a and 201b may be generated, corresponding to different application



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programs, different versions of the same application program, tuning tables, program guides, other data tables, and the like' (column 3, lines 32-45).

As to claim 14:

- The claimed "code section lookup table includes an identifier for identifying specific code sections containing customized versions of application code objects to be distributed to particular ones of said end user terminals" is met by 'As one example, module 201a may comprise an executable video game program compatible with HCTs which include at least 500 kilobytes of memory, while module 201b may comprise a more elaborate version of the same program which requires at least 1 megabyte of memory' (column 3, 45-56).

As to claim 15:

- The claimed "processor for providing a software image that includes a code section lookup table, a common code section for all terminals in the network, and specific code sections for different terminals in the network" is met as discussed in claim 1 and by main processing board 104.
- The claimed "transmitter for communicating the software image to said terminals; said specific code sections being provided for at least one of: (i) different terminal hardware configurations, (ii) different terminal device driver code, (iii) different terminal models, (iv) different terminal software features, (v) different system protocols" are met as discussed in claim 1.

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As to claim 16:

- The claimed “receiver adapted to receive a software image” is met by “FIG. 2 depicts a system employing various principles of the invention including an authoring source 201, a transmitting source 202, and a plurality of terminals 203 and 204 for receiving module descriptors” (column 2, lines 64-67) and “In accordance with various embodiments of the invention, portions of table T are transmitted continuously from transmitting source 202 over network N to terminals 203 and 204. Thus, each terminal receives a list of all modules, their compatibility interface requirements, and the location where each module may be found” (column 4, lines 22-43).
- The claimed “said software image including a code section lookup table” is met as discussed in claim 1.
- The claimed “a common code section for a plurality of terminals in the network” is met as discussed in claim 1.
- The claimed “specific code sections for different terminals in the network” is met as discussed in claim 1.
- The claimed “processor for locating and extracting common and specific code sections intended for said user terminal” is met as discussed in claim 6.
- The claimed “memory for storing the extracted code sections” is met as discussed in claim 4.

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As to claim 17:

The claimed "specific code sections are provided for at least one of":

- The claimed "(i) the user terminal hardware configuration (ii) the user terminal device driver code (iii) the user terminal model (iv) user terminal software features (v) network system protocols" are met as discussed in claim 1.

As to claim 18:

- The claimed "said common and specific code sections together include all of the executable code necessary for said user terminal to provide services to an end user" is met as discussed in claim 2.

As to claim 19:

- The claimed "terminal is a set-top box for use in a subscription television system" is met by "FIG. 2 shows a system for downloading different module versions to diverse HCTs in accordance with various aspects of the invention. In FIG. 2, the system 200 includes an authoring source 201, a transmitting source 202 such as a headend, a network N such as a cable television network" (column 3, lines 32-45).

As to claim 20:

- The claimed "said code section lookup table comprises: first section containing information required to enable the user terminal to identify the specific code

sections for the terminal second section for enabling the user terminal to locate the common and specific code sections within said software image for extraction and storage” are met as discussed in claim 5.

As to claim 21:

- The claimed “user terminal: locates and extracts the common code sections using the second section of said code section lookup table and subsequently locates and extracts the specific code sections using the first and second sections of the code section lookup table” are met as discussed in claim 6.

As to claim 22:

- The claimed “user terminal in accordance with claim 16, further comprising: a user interface adapted to enable an end user to provide a Software ID for identifying a specific software feature to be located and extracted” are met as discussed in claim 10 and 11.


### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shirley Chang whose telephone number is (571)272-8546. The examiner can normally be reached on 8:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571)272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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